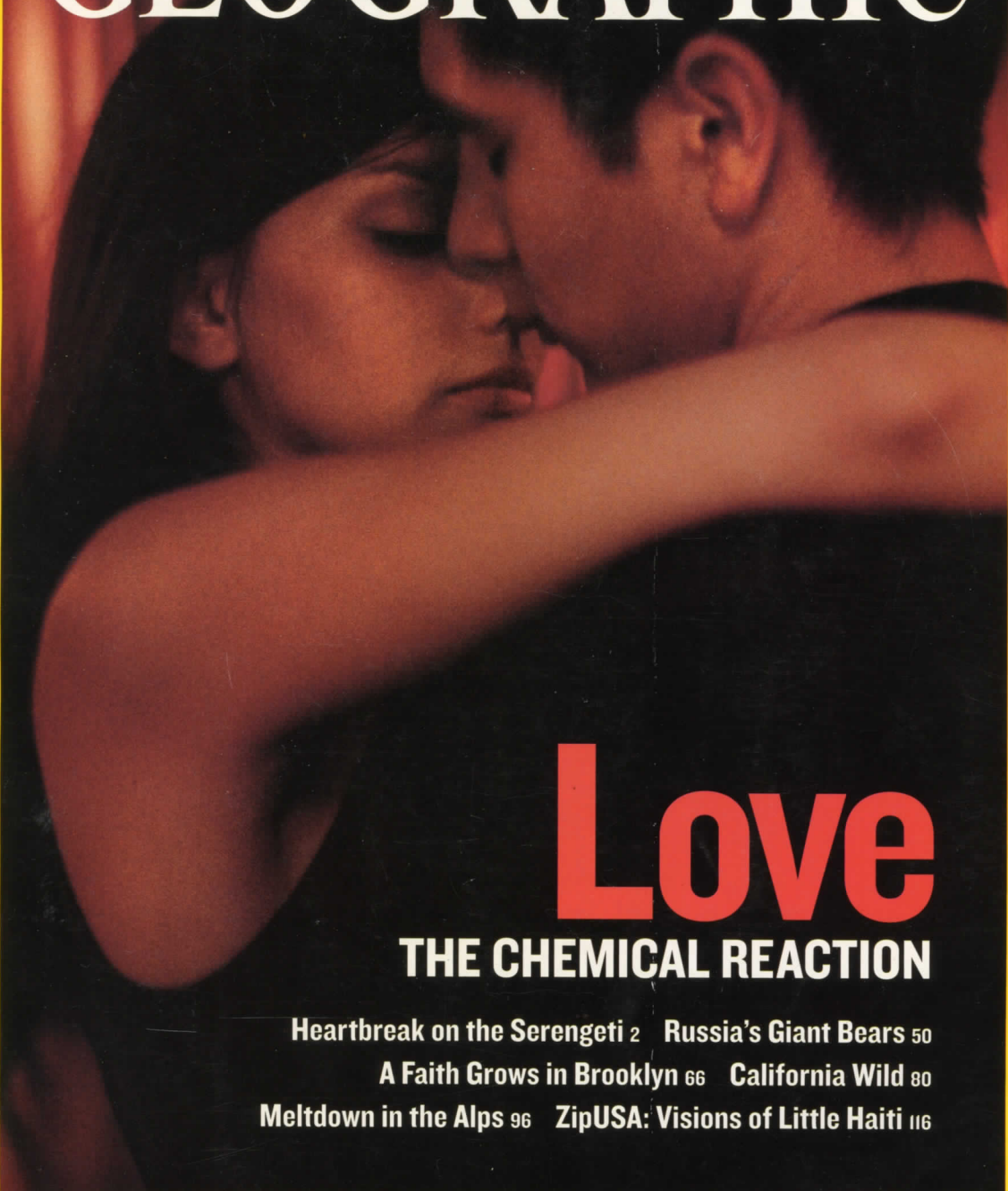


NATIONALGEOGRAPHIC.COM/MAGAZINE

FEBRUARY 2006

NATIONAL GEOGRAPHIC

A romantic couple, a man and a woman, are shown in a close embrace, about to kiss. The woman is on the left, her face partially visible, and the man is on the right, his face partially visible. They are both looking down at each other. The background is dark and out of focus, with some warm, reddish light on the left side. The overall mood is intimate and romantic.

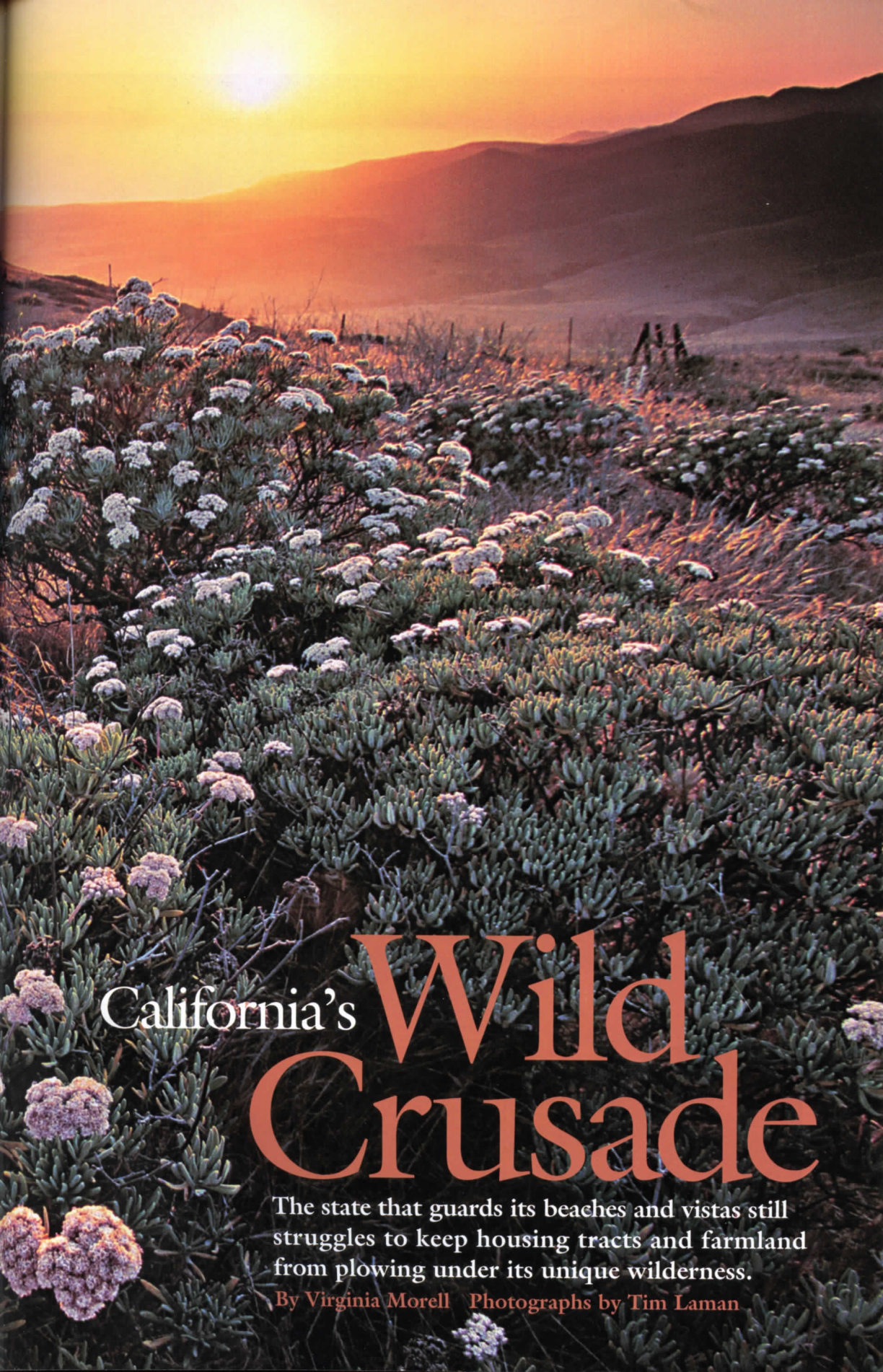
Love

THE CHEMICAL REACTION

Heartbreak on the Serengeti 2 Russia's Giant Bears 50

A Faith Grows in Brooklyn 66 California Wild 80


Meltdown in the Alps 96 ZipUSA: Visions of Little Haiti 116



California's Wild Crusade

The state that guards its beaches and vistas still struggles to keep housing tracts and farmland from plowing under its unique wilderness.

By Virginia Morell Photographs by Tim Laman

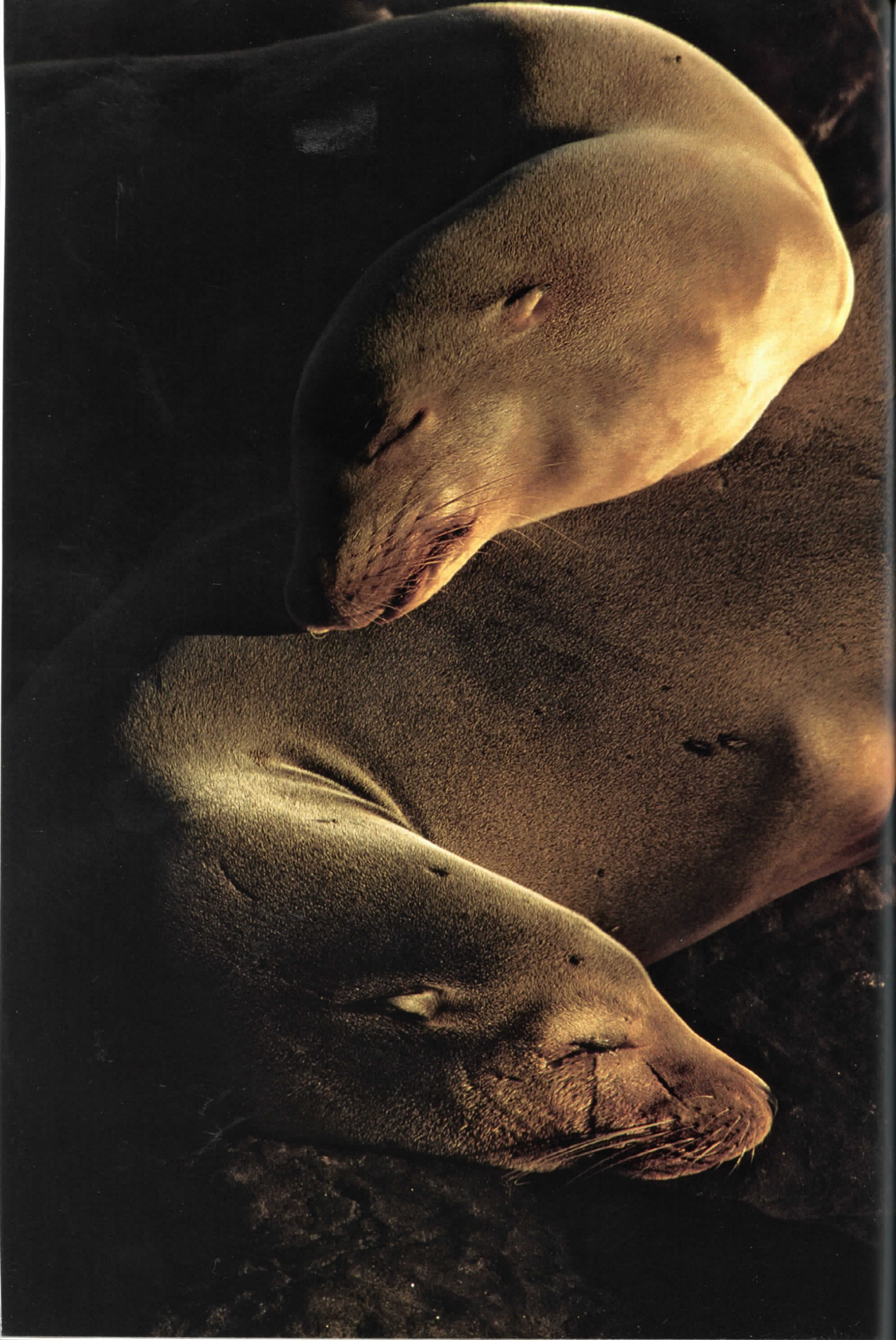
A photograph of Santa Cruz Island buckwheat in bloom. The foreground is filled with dense, low-lying green bushes with numerous small, light-colored flowers. The background shows rolling hills under a warm, orange-hued sky at sunset or sunrise. The text is overlaid on the bottom left of the image.

Santa Cruz Island buckwheat flourishes again after decades of destruction by feral sheep and pigs left over from ranching days. Now owned and protected by the Nature Conservancy and the National Park Service, Santa Cruz is one of the eight Channel Islands, called the Galápagos of North America for their wealth of endemic species.





Bent but unbroken, an ancient bristlecone pine endures in California's White Mountains. The slow-growing bristlecones, Earth's oldest known living things, can survive for 4,000 years or more and may stand long after their deaths.



"The original list had ten hotspots," says Michael Hoffmann, a biologist with CI. "Now we're up to 34. We've recently recognized that Japan has a diverse flora, and the Ethiopian Highlands also needed to be on the list because of its rare Afromontane habitats and species."

The hotspot approach exerts a strong influence in setting global conservation priorities, focusing public attention and strengthening the resolve of governments. It has helped attract an estimated 750 million dollars to the conservation cause, according to CI.

CI's hotspots often, though not always, overlap with regions selected by other groups for targeted effort, including the 218 Endemic Bird Areas defined by BirdLife International and the Global 200 Ecoregions defined by the World Wildlife Fund. Conservationists are working to increase the overlap and avoid missing important regions, recognizing that the best way to save threatened species is to protect the places where they live.

Identifying irreplaceable habitats and the species they hold is one thing; protecting them is another. On the ground, conservationists run headlong into questions of local politics, economic stability, and human need.

"We haven't focused our efforts on the hotspots in developed countries, although we believe such areas are truly important," says Hoffmann. "We've chosen to work in developing countries. We'd like to think that developed countries would take care of their hotspots themselves."

The California Floristic Province faces grave threats, as do four other hotspots with a Mediterranean climate (hot, dry summers and cool, wet winters)—parts of Chile, Australia, and South Africa, and, not surprisingly, the Mediterranean basin. The reason? "They're all beautiful places with wonderful climates, and people want to live in them," says Rebecca Shaw of the Nature Conservancy in San Francisco. "So all these regions tend to face the same problems: fragmentation of habitats, urbanization, and the expansion of agriculture."

California alone, already the most populous state in the country, expects ten million new residents in the next 25 years. "Planning for growth is truly our biggest problem," says Shaw. "Yet, unlike some other regions, there is high awareness about how important environmental protection is, from the people to the legislature."


California has protected 20 percent of its land—a percentage second only to Alaska. The catch: Most reserves are set aside based on scenic values (in high elevations) and lowest economic impact, not on saving the most biodiversity. In fact, only a tiny percentage of the areas where California's hotspot species live is protected.

Above the lush hedges of Rancho Mirage, bighorn sheep continue to turn back at the sight of the fence. But Guy Wagner knows the fence alone will not save this population of sheep. Housing and golf course developments continue to chip away at the valley floor, as do homes and hiking and riding trails in the mountains. "We're pushing the sheep into a narrow band of habitat," Wagner says, "one that doesn't include enough browse for them on the alluvial fans or escape routes up the slopes. Will they survive? It's going to take some tough choices."

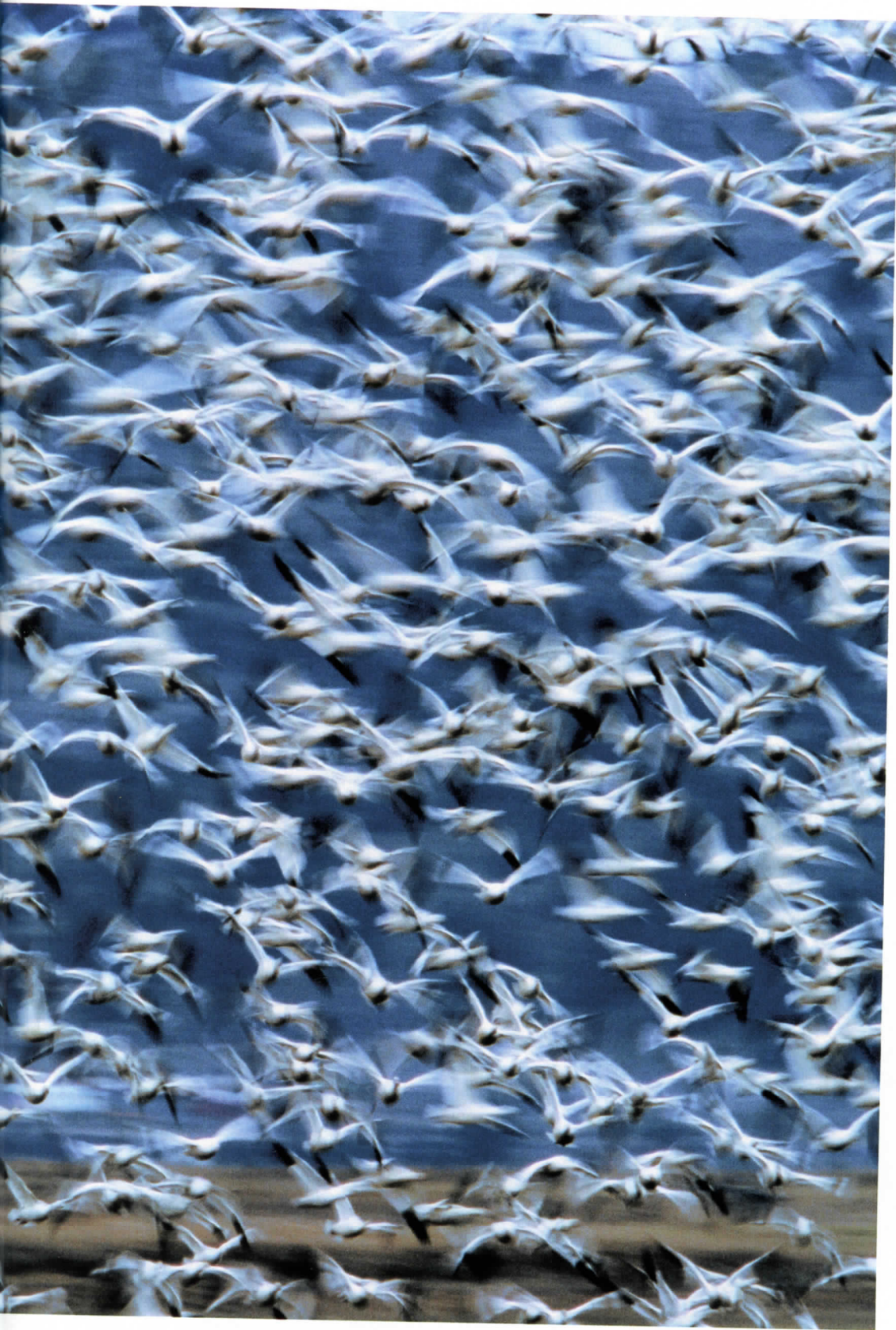
California sea lions doze on Goldfish Point in La Jolla. Protected since 1972, the marine mammals number over 200,000, with the population growing about 6 percent a year. Preying on fish, the sea lions stress the ecosystem and compete with local fisheries, raising questions about their optimal numbers.

Following pages

A blizzard of snow geese and Ross's geese sweeps over the marshes of the Lower Klamath National Wildlife Refuge in northern California. The nation's first waterfowl refuge, this land was set aside in 1908 after much of the region's wetlands had been drained for farmland.

 **CALIFORNIA DREAMING** Download free wallpaper and bring the wonders of California's hotspot to your desktop. Then browse an online-exclusive photo gallery and share your opinion on how to preserve this distinctive region in our forum at ngm.com/0602.







On Santa Cruz Island (above), candleholder live-forevers stick out from a canyon wall, increasing their chances of being pollinated. "Sheep found these succulent plants very tasty, and they declined," says botanist Steve Junak. "Now that the sheep are all gone, the live-forevers have rebounded." It's a different story in California's Prairie Creek Redwoods State Park (right), where botanist Steve Sillett scales a 325-foot giant to check sensors that measure microclimates in the tree's crown. "Old-growth redwoods were so heavily logged by the 1970s that less than five percent of them are left," he says, "and only one percent of the really tall ones."



They may look like snakes poised to strike, but cobra lilies are passive killers. These carnivorous pitcher plants grow in soil called, fittingly enough, serpentine. Inhospitable to most plants, serpentine soil is loaded with metals and lacks nutrients. The cobra lily compensates by luring insects into its reservoir with nectar, then digesting the victims, a vital source of phosphorus and nitrogen.





Winter home to nearly a million waterfowl, the Sacramento National Wildlife Refuge in California's immense Central Valley offers sanctuary along the Pacific flyway between Mexico and Alaska. Yet farms and cities have gobbled up nearly all the valley's wetlands, essential for sustaining diverse animal life. The state's agreeable weather and attractive geography have promoted a seemingly endless influx of people, making habitat protection an increasingly difficult enterprise. □

